

United States Patent and Trademark Office

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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

09/24/2003

James a Mitchell 695 Kenmoor SE Post Office Box 2567 Grand Rapids, MI 49501

	EXAMINER		
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FERGUSON, LAWRENCE D

ART UNIT CLASS-SUBCLASS

428-469000

1774

DATE MAILED: 09/24/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686 417	10/11/2000	Johannes Stollenwerk	HEROT P 441	6074

TITLE OF INVENTION: CONDUCTIVE TRANSPARENT LAYERS AND METHOD FOR THEIR PRODUCTION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$650	\$0	\$650	12/24/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 09/24/2003 James a Mitchell 695 Kenmoor SE Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below. Post Office Box 2567 Grand Rapids, MI 49501 (Depositor's name) (Signature) (Date) APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/686,417 10/11/2000 Johannes Stollenwerk HERO7 P-441 6074 TITLE OF INVENTION: CONDUCTIVE TRANSPARENT LAYERS AND METHOD FOR THEIR PRODUCTION APPLN, TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE YES nonprovisional \$650 \$0 \$650 -12/24/2003 EXAMINER ART UNIT CLASS-SUBCLASS FERGUSON, LAWRENCE D 1774 428-469000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent 'Fee Address" indication (or "Fee Address" Indication form attorneys or agents. If no name is listed, no name PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual □ corporation or other private group entity 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee A check in the amount of the fee(s) is enclosed. Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to ☐ Advance Order - # of Copies Deposit Account Number (enclose an extra copy of this form). Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date)

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to Inis collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents Alexandria, Virginia 22313-1450. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/686,417	10/11/2000	Johannes Stollenwerk	HERO7 P-441	6074
759	90 09/24/2003		EXAM	NER
James a Mitchell 695 Kenmoor SE			FERGUSON, L	AWRENCE D
Post Office Box 256	57		ART UNIT	PAPER NUMBER
Grand Rapids, MI 4	9501		1774	
			DATE MAILED: 09/24/2003	,

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 83 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 83 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



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09/686,417	10/11/2000	Johannes Stollenwerk	HERO7 P-441	6074
75	90 09/24/2003		EXAM	INER
James a Mitchell 695 Kenmoor SE			AWRENCE D	
Post Office Box 25	67		ART UNIT	PAPER NUMBER
Grand Rapids, MI	19501		1774	
			DATE MAILED: 09/24/2003	3

Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fed. Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

(b) Issue fee for issuing a design patent:

(c) Issue fee for issuing a plant patent:

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

· .	Application No.	Applicant(s)
Notice of Allowability	09/686,417	STOLLENWERK ET AL.
	Examiner '	Art Unit
	Lawrence D Ferguson	1774
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in this b) or other appropriate communications. This application is subjection	s application. If not included ation will be mailed in due course. THIS
1. A This communication is responsive to 7-1-03.		
2. The allowed claim(s) is/are <u>1-16</u> .		
3. The drawings filed on are accepted by the Examin		
 4.	ider 35 U.S.C. § 119(a)-(d) or (f).	
 Certified copies of the priority documents have 		
2. Certified copies of the priority documents have	e been received in Application N	0
 Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). 	ocuments have been received in	this national stage application from the
* Certified copies not received::		
5. Acknowledgment is made of a claim for domestic priority u		ovisional application).
(a) The translation of the foreign language provisional		
6. Acknowledgment is made of a claim for domestic priority u	under 35 U.S.C. §§ 120 and/or 12	21.
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of	of this communication to file a repf this application. THIS THREE-	ly complying with the requirements noted MONTH PERIOD IS NOT EXTENDABLE
7. A SUBSTITUTE OATH OR DECLARATION must be sub- INFORMAL PATENT APPLICATION (PTO-152) which gives rea		
 CORRECTED DRAWINGS must be submitted. (a) ☐ including changes required by the Notice of Draftspe 1) ☐ hereto or 2) ☐ to Paper No 	-	·
(b) \square including changes required by the proposed drawing	correction filed, which ha	as been approved by the Examiner.
(c) \square including changes required by the attached Examine	r's Amendment / Comment or in t	the Office action of Paper No
Identifying indicia such as the application number (see 37 CFR each sheet.	1.84(c)) should be written on the dr	rawings in the front (not the back) of
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR		
Attachment(s)		
 1 ☐ Notice of References Cited (PTO-892) 3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5 ☐ Information Disclosure Statements (PTO-1449), Paper No 	4⊠ Interview Su	ormal Patent Application (PTO-152) immary (PTO-413), Paper No Amendment/Comment
7		Statement of Reasons for Allowance
	·	

Application/Control Number: 09/686,417 Page 2

Art Unit: 1774

Examiners Amendment

An examiner's amendment to the record appears below. Should the changes 1. and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

In claim 25, please delete "system of claim 1" and insert in its place --system of claim 21--.

Authorization for this examiner's amendment was given in a telephone interview with Gunther Evanina on September 17, 2003.

Reasons for allowance

- 3. Claims 1-11 and 21-25 are allowed and renumbered as claims 1-16.
- 4. The following is an examiner's statement of reasons for allowance: The closest prior art does not teach or suggest a conductive transparent layer system with two oxide layers and a silver layer interposed between on a substrate, characterized in that with a surface resistivity of less than 2.9sq, the mean Haacke quality factor of the layer system is greater than 0.085-1. The prior art does not teach motivation to adjust the

transmittance or surface resistivity in order to achieve the claimed Haacke quality factor or suggestion for modification to make the invention as instantly claimed.

Any comments considered by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. A Facsimile center has been established in Group 1700 on the 8th floor of Crystal Plaza 3. The hours of operation are Monday through Friday 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is (703) 872-9311. This location should be used in all instances when faxing any correspondence to Art Unit 1774. Use of the Group 1700 center will facilitate rapid delivery of materials to Examiners in Art Unit 1774.

Lawrence D. Ferguson

Examiner Art Unit 1774 SUPERIOR OF CENTER 1700